



## Technology Evaluation for Environmental Risk Mitigation Principal Center

### UV Cure Coatings

ESTCP Project Numbers: WP-0801 and WP-0804

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### Background

Temperature sensitive substrates such as aluminum and magnesium are used in the manufacture and sustainment of aerospace systems and ground support equipment.

### Objective

To demonstrate/validate VOC/HAP free UV Curable coatings to replace solvent-borne organic coatings and the use of robotics in curing process.

### Period of Performance

- March 2008 to March 2012

### Stakeholders

Air Force (Project Lead: Air Force Research Lab), Navy, Coast Guard, and NASA monitoring

### Benefits

- Elimination of Volatile Organics Compounds (VOCs)
- Elimination of Hazardous Air Pollutants (HAPs)
- Reduction/elimination of hazardous waste
- Improved process efficiencies (shorter cycle time, reduced energy consumption)
- Improved transfer efficiencies

### Document Status

- Joint Test Protocol – Complete

### Recent Progress

- Ordered powder and substrates – October 2008
- Briefed WP-0801 at C3P/NASA International Workshop – November 2008
- Reported to Environmental Security Technology Certification Program on first year progress– December 2008

### Milestones

- Completed joint test protocol – September 2008
- Acquire robot

### Near-Term Goals

- Begin validation testing.

Updated 12/31/08